



## King's Research Portal

DOI:

[10.1177/0020764017723939](https://doi.org/10.1177/0020764017723939)

*Document Version*

Peer reviewed version

[Link to publication record in King's Research Portal](#)

*Citation for published version (APA):*

Gronholm, P. C., Onagbesan, O., & Gardner-Sood, P. (2017). Care coordinator views and experiences of physical health monitoring in clients with severe mental illness: a qualitative study. *International Journal of Social Psychiatry*, 63(7), 580-588. <https://doi.org/10.1177/0020764017723939>

### Citing this paper

Please note that where the full-text provided on King's Research Portal is the Author Accepted Manuscript or Post-Print version this may differ from the final Published version. If citing, it is advised that you check and use the publisher's definitive version for pagination, volume/issue, and date of publication details. And where the final published version is provided on the Research Portal, if citing you are again advised to check the publisher's website for any subsequent corrections.

### General rights

Copyright and moral rights for the publications made accessible in the Research Portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognize and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the Research Portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the Research Portal

### Take down policy

If you believe that this document breaches copyright please contact [librarypure@kcl.ac.uk](mailto:librarypure@kcl.ac.uk) providing details, and we will remove access to the work immediately and investigate your claim.

## **Care coordinator views and experiences of physical health monitoring in clients with severe mental illness: a qualitative study**

Petra C Gronholm<sup>1,2^</sup>, Oluwadamilola Onagbesan<sup>1^</sup>, Poonam Gardner-Sood<sup>1</sup>

<sup>^</sup>Joint first authors

<sup>1</sup> Department of Psychosis Studies, King's College London, Institute of Psychiatry, Psychology and Neuroscience, UK

<sup>2</sup> Health Service and Population Research Department, King's College London, Institute of Psychiatry, Psychology and Neuroscience, UK

### **Corresponding author:**

Petra Gronholm. Health Service and Population Research Department; Institute of Psychiatry, Psychology & Neuroscience; King's College London; Box P029 David Goldberg Centre; De Crespigny Park; London SE5 8AF; UK.

Phone: +44(0)20 7848 5421.

Email: [petra.gronholm@kcl.ac.uk](mailto:petra.gronholm@kcl.ac.uk)

## **Abstract**

**Background:** Excess mortality amongst people with severe mental illness (SMI) is largely attributed to co-morbid physical illness. Improving the physical health of this population is critically important, however, physical health monitoring amongst people with SMI is often inadequate.

**Aims:** This study aimed to facilitate an enhanced understanding of barriers to successfully attend to clients' physical health in mental health settings, through exploring care coordinators' views and experiences regarding their ability to monitor physical health in clients with SMI (specifically, psychosis).

**Methods:** Semi-structured interviews were conducted with seven care coordinators from a South East London (UK) community mental health team. Data were analysed using thematic analysis principles.

**Results:** Three themes were identified in these data, capturing (1) how care coordinators viewed the professional roles of other clinical staff and themselves, (2) views on barriers to the provision of physical healthcare, and (3) factors that motivated care coordinators to attend to clients' physical health.

**Conclusions:** Our findings can inform efforts to implement physical healthcare interventions within mental health settings. Such insights are timely, as academic literature and guidelines regarding clinical practice increasingly promote the value of integrated provision of mental and physical healthcare.

**Key words:** Psychosis, community mental health, attitudes, health disparities, excess mortality, treatment guidelines

## Introduction

Mortality rates are high amongst people with severe mental illness (SMI) such as schizophrenia and other psychotic disorders (Baxter et al., 2016; Hjorthøj, Stürup, McGrath, & Nordentoft, 2017; Thornicroft, 2013). Excess mortality in this population can largely be attributed to co-morbid physical illnesses (Liu et al., 2017); SMI groups have a high prevalence of, for example, cardiovascular disease, respiratory disease, and diabetes. Also risk factors for these illnesses (e.g. metabolic syndrome, hypertension, abdominal obesity and glucose intolerance) are common in SMI groups (Papanastasiou, 2013). Side-effects of antipsychotic medication can also contribute to the presence of these precipitants, for example through altering appetite, reducing capacity to exercise and producing glucose intolerance (Ventriglio, Gentile, Stella, & Bellomo, 2015).

Improving the physical health of people with SMI is vital in reducing excess mortality amongst this vulnerable population. In the UK, this is recognised by policy recommendations (Department of Health, 2006; Royal College of Psychiatrists, 2013; Working Group for Improving the Physical Health of People with SMI, 2016), and current national-level clinical guidelines specify that mental healthcare providers in secondary care settings should be offering physical healthcare monitoring and interventions to clients with psychosis (NICE, 2014).

Despite these recommendations, physical health monitoring amongst people with SMI is often inadequate (Baxter et al., 2016; Happell et al., 2016; Millar, Sands, & Elsom, 2014; Montejo, 2010). This has been attributed to a range of factors (De Hert et al.,

2011), including a lack of training, guidelines and general awareness of the importance of physical health monitoring (Happell, Platania-Phung, & Scott, 2013; Millar et al., 2014), concerns of increasing workloads (Dunbar, Brandt, Wheeler, & Harrison, 2010; Happell et al., 2011; Wilson, Randall, & Weaver, 2014), uncertainty amongst healthcare professionals regarding whose responsibility this task is (Barnes, Paton, Cavanagh, Hancock, & Taylor, 2007; Wilson et al., 2014), and staff attitudes regarding what falls within their clinical role (Chadwick & Withnell, 2016; Dunbar et al., 2010; Wilson et al., 2014).

An improved understanding of barriers to physical health monitoring amongst people with SMI could inform efforts to reduce premature mortality in this population.

Understanding barriers related to clinical staff's beliefs and attitudes might be particularly useful, as these constitute potentially modifiable influences. Thus, this study aimed to explore care coordinators' views and experiences regarding their ability to monitor physical health in clients with SMI.

## **Methods**

This study used semi-structured individual interviews to explore care coordinators' views and experiences of physical health monitoring among clients with SMI (specifically, psychosis). This work is underpinned by a pragmatic research philosophy. This stance posits that there are multiple means through which the world can be understood, and what research methods are most appropriate at a given time depend

on the specific research question. As this study aimed to gather a rich, in-depth understanding of care coordinators' views and experiences of physical health monitoring, a qualitative research approach was selected. Qualitative research methodologies generally draw on an inductive logic of inquiry, and focus on exploring the experiences of small specific samples through, for instance, spoken, written or visual narratives, or observation of social dynamics. Qualitative methodologies are underpinned by the assumption that such data can provide insights regarding participants' beliefs, attitudes and values, and a key emphasis is placed on understanding such meanings and processes (Sale, Lohfeld, & Brazil, 2002).

The study was approved by the City and East Research Ethics Committee (University Hospital Bristol NHS Foundation Trust; REC ref: 11/LO/0950).

### **Participants**

Participants were care coordinators recruited from a Complex Needs and Recovery team in the Oxleas National Health Service trust in South East London, UK. All care coordinators at the service were invited to take part, and interviews were arranged for all those interested. In the end, seven interviews were conducted. Preliminary analysis notes were made and initial themes identified during data collection. Reflecting on these notes, it was judged that novel themes were no longer emerging during the final interviews. Thus, once these data had been collected it was judged that thematic saturation had been reached (Morse, 1995). Subsequently, the choice was made to not pursue further recruitment at another service site. All participants provided written informed consent. Table 1 provides an overview of participants' key characteristics.

**(TABLE 1)**

**Data collection and analysis**

All Interviews were conducted by one researcher (OO) in September 2011 – February 2012. A topic guide was used, covering key areas such as, who care coordinators felt was responsible for their clients' physical health monitoring, what their role was in clients' physical healthcare, and possible views on implementing changes in clients' physical health. This guide was developed through identifying key areas of enquiry as reported (i) in past literature and (ii) a service user representative. Interviews (duration 40-90 minutes) were conducted in a private room within the service premises; all were audiotaped, transcribed verbatim, and anonymised.

Thematic analysis principles (Braun & Clarke, 2006) were used to identify key themes emerging from these data. This process was conducted primarily by one researcher (OO), and commenced with initial analysis concurrent with data collection and repeated reading of the transcripts and ensuring accuracy through comparing transcribed content to recordings. This was followed by initial coding of the transcripts; initial codes were then cross-referenced across transcripts to identify commonalities and linkages. Subthemes reflecting groupings of codes began to emerge through this process, alongside broader themes capturing related subthemes. Participant quotes reflecting the codes were identified and collated throughout the analysis process, to ensure the results remained close to the data. The process was validated by regularly

discussing emerging themes with a colleague (PGS), to ensure findings were not unduly influenced by a single researcher's perspective. A clear audit trail of the analysis process was produced for transparency, and these notes were comprehensively reviewed by a third colleague (PCG).

### Reflexivity

The study was conceived by OO and PGS, and undertaken by OO as a master's degree research project under the supervision of PGS. OO had previously worked as an assistant psychologist on a mental health inpatient ward, so had preconceptions regarding the challenges faced by mental health professionals when addressing the physical health needs of people with SMI. PGS had several years' experience of conducting research into SMI patients and physical health, and was completing a doctoral thesis examining relationships between psychological constructs, health behaviours and health outcomes in SMI patients concurrently with conducting this study. PCG, a health services researcher with a background in psychology, was conducting research on premature mortality due to physical illnesses amongst people with SMI alongside contributing to this study. While researchers' experiences and disciplinary assumptions necessarily influence the collection and analysis of qualitative data (Ritchie, Lewis, McNaughton Nicholls, & Ormston, 2013), steps were taken to ensure that these influences did not constrain the conduct of the present study. For example, OO kept a process journal to actively reflect on any preconceived assumptions held regarding physical health provision in the study setting and participants' views on this. Furthermore, to mitigate the risk of researchers' personal



experiences and/or assumptions unduly influencing the focus of the data collection, previous literature and service user expertise were used to identify key areas of inquiry to be covered by the study topic guide.

## **Results**

We identified three main themes reflecting care coordinators' views and experiences of physical health monitoring in clients with SMI: (1) perceived boundaries of professional roles; (2) barriers to physical healthcare provision; and (3) factors motivating physical healthcare provision. These themes and subthemes (illustrated in Table 2) are discussed next, alongside supporting quotes.

### **(TABLE 2)**

#### **1. Perceived boundaries of professional roles**

This theme captured how care coordinators described their own professional role, and the roles of other healthcare staff working alongside them. Within this, two subthemes reflected views on (i) clearly defined clinical roles of various healthcare staff, and (ii) overstepping the perceived boundaries of the care coordinator role to attend to clients' physical health needs.

##### **(i) Clearly defined clinical roles**

Care coordinators' described perceived division of responsibilities among clinicians (psychiatrists, general practitioners/GPs, care coordinators) working within multi-

disciplinary teams. Care coordinators identified distinctions between roles, but also expressed a disparity between what these roles encompassed and what happened in routine practice.

Psychiatrists' role was described as focused on clients' mental health, but having moved towards also alongside this considering social and physical wellbeing rather than a restricted focus on mental health in isolation.

*'Before [psychiatrists'] role was to focus on the mental health of the clients. But I think it's becoming more holistic . . . they no longer focus just on the mental health aspect, they are also looking at the physical.'*

However, care coordinators also discussed how this broadened scope had not translated to practice, as psychiatrists rarely monitored clients' physical health.

Psychiatrists' client contact was generally focused on managing psychiatric medication, seemingly due to time constraints. Subsequently, psychiatrists were not thought to be well placed to take the lead in monitoring clients' physical health.

*'A consultant psychiatrist is going to be a waste of their time and money monitoring [physical health] directly I suppose.'*

GPs' role, on the contrary, was strongly associated with the responsibility of physical healthcare, and GPs were thought well-suited to monitor clients' physical health. Care coordinators described that also psychiatrists, commissioners and government regulations seemingly expected GPs to attend to clients' physical health.

*'I know that in terms of the GPs monitoring, the consultant's write to the GPs before CPAs [Care Programme Approach meetings]. There's a letter and it always comes from the consultant (...) we've had big discussions about physical health and they are keen for the GPs to be doing the physical health monitoring'*

Care coordinators did, however, also describe a discrepancy between their clients' physical health needs and the services offered by GPs. This was attributed to variation in GPs' practices, capacity and skills.

*'GPs massively vary as people do, you've got differences in age, attitude, ethnicity, language skills, outlooks, beliefs, all sorts [the care received] it's very variable.'*

Care coordinators felt that their own role was primarily to observe clients' overall wellbeing and coordinate their care.

*'Because you're in a multidisciplinary team (...) if you're specifically looking at doing physical health interventions my role would be to coordinate'*

Although care coordinators were willing to monitor clients' global health, they felt that the responsibility of specific physical health monitoring was with the GP.

*'The care coordinators should monitor what's going on. The doctors should do physical health.'*

#### (ii) Overstepping scope of care coordinator role

Care coordinators frequently reflected on the need to step outside their perceived role of monitoring global health and coordinating care to support clients' physical health.

Namely, care coordinators' discussed taking a holistic approach to ensure clients received assistance that was not restricted to mental health.

*'As a care coordinator you coordinate patient care (...) It involves a holistic approach. You look at the client as a whole (...) social needs, and mental health needs, their physical health needs, needs of the family. (...) Your main role is to make sure that any needs you identify it, your client identifies it and you try as much as possible to meet those needs'*

This broad approach to supporting clients' wellbeing had meant that at times care coordinators provided a range of assistance that went over and above what was perceived to fall within their role and associated activities. For example, care coordinators described attending exercise classes and going grocery shopping for healthy foods with clients.

*'[Client] wants to start a water aerobics class, but doesn't wanna do it on her own. So I've got to get ready to go along and do a water aerobics class. I've done fitness classes with people.'*

*'I'm meeting him once a week and go to [supermarket] and buy [brand name] smoothies and veg pots and he loves them!'*

## **2. Barriers to physical healthcare provision**

This theme described care coordinators' perceptions of barriers preventing them from successfully supporting clients' physical health. These influences are discussed in two

subthemes, reflecting factors associated with (i) their clients' illness, and (ii) the healthcare system.

#### (i) Illness-related factors

Clients' mortality and morbidity were frequently discussed, acknowledging the relationship between SMI and poor physical health. Care coordinators acknowledged the compounding effects of antipsychotic medications and psychotic symptoms on clients' motivation to engage in healthy lifestyles, and the subsequent impacts on clients' physical health. Low motivation had become a way of life, affecting clients' willingness to increase physical activity and adopt healthy lifestyle habits.

*'I think there's a big problem with many of the clients with being overweight (...) sometimes [I] feel that the medication is a bit of an excuse for weight gain. But it can be a side-effect of the medication. (...) the clients that I work with are a little bit sedentary, they are not particularly keen on exercise'*

*'It's the people we work with, which is who they are and negative symptoms of schizophrenia is lack of motivation, self-neglect'*

Care coordinators also described how psychotic symptoms affected clients' definition of health, which often differed from that of healthcare professionals. This disparity could act as a barrier to physical health interventions.

*'We are having a lot of difficulty trying to monitor because as far as he is concerned he is healthy... he hasn't got a headache, he hasn't woken up with any pain (...) he told me*

*he will go to his GP if he is unwell. So because he is well he doesn't have any reason to go to the GP.'*

Additionally, clients' mental state could act as a barrier in engaging with physical health monitoring.

*'[They] don't want to register with the GP and that would be because of their mental state. One person is very suspicious of most people and therefore refuses all physical tests, refuses all physical interventions, erm doesn't want to go to the GP, doesn't trust the GP.'*

#### (ii) System-related factors

Care coordinators' expressed frustration over how practical aspects of working within their service-setting impacted on their work. Issues related to electronic information storage systems, funding, and staffing levels were discussed as not only affecting care coordinators' workloads and efficiency, but also their ability to provide physical health monitoring and interventions.

Regarding electronic systems, care coordinators described how the time-consuming nature of the computerised patient note system limited time spent with clients. Care coordinators also reported losing interest in the non-streamlined process of reporting details, which could compromise the thoroughness of recording key clinical events.

Additionally, the healthcare trust's intranet system was considered difficult to navigate. This had prevented care coordinators from identifying relevant information and sign-posting clients to physical health services.

*'There are principle information leaflets that you can print off for people. The only problem is, is that the intranet is awful. You can't ever find anything. (...) It would have been nice if there was something there that was easily accessible (...) for like diabetes, stuff for high cholesterol (...) you know, user-friendly easy for people to understand. And erm be able to have discussion around it, rather than having to spend time trailing through the internet trying to find something that could be useful.'*

A lack of funding within the healthcare trust was discussed as another barrier to providing physical health interventions.

*'We used to be able to give gym passes to everyone but we can't do that anymore, now they have to pay (...). [There is a] lack of meaningful groups (...) If there was a dance group that would be really good, or like a cooking group to teach people healthy cooking'*

Without funding, promotion of physical health monitoring was often limited to verbal instructions and theoretical discussions. Activity groups and practical demonstrations were suggested as more effective strategies to implement changes in physical health. To counter the detrimental discrepancy between available funding and clients' needs, some care coordinators had taken an active role in fundraising to help promote physical health in their trust. This also corresponds with care coordinators going beyond the scope of their role, as discussed earlier.

*'I can see the money [for the music group] going next year. But also we're getting paid gigs to generate money so it can sustain itself.'*

Staffing issues was another barrier. All care coordinators described caseloads exceeding recommended limits, and the high volume of clients to see meant meeting times were reduced. Consequently, what could be achieved during meetings was compromised, with physical health monitoring and interventions often falling below other priorities.

*'If they do more with client A, what's going to happen to client B, client C? They're gonna get a shorter period. There's only so many hours in a day. . .'*

### **3. Factors motivating physical healthcare provision**

This theme described care coordinators' thoughts on what motivated them to monitor the physical health of their clients. Two subthemes reflected these thoughts: (i) the wish to facilitate the therapeutic relationship (which underpinned efforts to support clients' physical health as a part of their global sense of wellbeing), and (ii) staff performance monitoring policies (which ensured that physical health needs were explicitly recognised in care practice).

#### **(i) Facilitating the therapeutic relationship**

Care coordinators discussed how the wish to facilitate the therapeutic relationship motivated efforts to support clients' global sense of wellbeing, including efforts to attend to clients' physical health. This rationale applied particularly when care coordinators discussed going beyond the perceived scope of their role to facilitate clients' participation in meaningful activities, as was exemplified earlier in relation to attending exercise classes and going shopping for healthy groceries with clients. These



tendencies for care coordinators to overstep the perceived scope of their role were discussed as a means to generate a functioning partnership with the client; facilitating a sense of confidence in the relationship with the care coordinator, to improve communication. This motivation to support clients with activities that *‘actually made a difference’* to their lives was described by a care coordinator in the following way:

*‘...making sure that there’s a relationship there that he actually gets on with me (...) it’s important so you feel like there’s a partnership so that he actually trusts me and trusts me if there’s anything he can come to me.’*

#### (ii) Staff performance monitoring policies

At times, staff performance documentation required for the ‘Payment by Results’ (PBR) (Department of Health, 2012) and the ‘Care Programme Approach’ (CPA) (Department of Health, 2008) policy schemes appeared to be a primary motivational facilitator for physical health monitoring.

*‘The supervision wasn’t about what you did with your clients it was about “what have you filled in on [system]?”’*

Namely, PBR required care coordinators to report on the completion of various tasks to secure funding for their healthcare trust. Similarly, care coordinators needed to evidence that people with SMI regularly had their needs assessed, planned and reviewed for the CPA. Providing this documentation was described as another task increasing care coordinators’ workloads at the expense of client contact time.

However, care coordinators also discussed how the need to have ‘boxes ticked’ for this meant that all aspects of client care – including physical health – were considered.

*‘When the CPA is coming up then you can start to get a little bit more tick box-ey.*

*Because you get very distracted in people’s crises and but the CPA- we have a CPA checklist which includes making sure all those things have happened’*

Similarly, the preparation for CPA meetings was discussed as a ‘trigger’ ensuring clients had had a physical health screen.

*‘But every CPA is a sort of trigger (...) that’s what’s quite useful, that sort of helps push things into motion.’*

However, despite the value of these processes to ensure clients’ physical health was attended to, the primary motivator was not clients’ welfare but a sense of monitoring staff performance.

*‘Welfare takes a second place than to actually making sure the documentation is there.’*

## **Discussion**

This study explored care coordinators’ thoughts on monitoring physical health in clients with SMI. We identified three themes reflecting this in our data. The first captured how care coordinators viewed the roles of other clinical staff and themselves, and how the perceived boundaries of these roles guided whether provision of physical

health monitoring and interventions was considered appropriate. The second theme described care coordinators' views on barriers to the provision of physical healthcare, with factors related to clients' illness and aspects of the healthcare system. The third theme reflected care coordinators' thoughts on factors that motivated attending to clients' physical health, which was discussed as a means to facilitate successful therapeutic relationships, and also as motivated by the documentation required for staff performance monitoring policies.

Integrated provision of mental and physical healthcare is now promoted globally, including current UK clinical guidelines and other health policy recommendations (Das, Naylor, & Majeed, 2016; Liu et al., 2017; NICE, 2014; Royal College of Psychiatrists, 2013). Our findings can inform strategies for successful integration of physical health monitoring into mental health settings in a number of ways.

Firstly, care coordinators discussed a sense of overstepping their role when attending to physical health. This corresponds with previous reports that role identities and diffusion of responsibility amongst mental health staff can detract from physical healthcare provision (Baxter et al., 2016; Happell et al., 2011; Wynaden et al., 2016). Even when mental health staff have been overtly positioned to attend to clients' physical health, challenges were reported due to the perceived incongruence with what was considered a part of the culture of mental health services (Dunbar et al., 2010; Wilson et al., 2014). To improve physical health monitoring practices, previous literature has recommended role clarification and appointing specific members of mental health service staff as responsible for physical health monitoring (Dunbar et al.,

2010; Happell et al., 2011; Working Group for Improving the Physical Health of People with SMI, 2016), and training regarding the importance of attending to physical health for mental health staff (Baxter et al., 2016; Happell et al., 2013; Wynaden et al., 2016). Our findings suggest that these efforts could prove more effective if staff training also explicitly addressed how staff roles and responsibilities are viewed. Secondly, care coordinators discussed feeling motivated to attend to clients' physical health when this was thought to improve the therapeutic relationship. However, physical health monitoring was also discussed as adding to the already heavy workload amongst care coordinators. This corresponds with previous reports that the burden of additional responsibilities related to physical health monitoring can act as a barrier to such tasks being successfully implemented by mental healthcare staff (Dunbar et al., 2010; Happell et al., 2011; Robson & Haddad, 2012; Wynaden et al., 2016). Thus, our findings indicate that to counter the view that physical health monitoring is a burdensome additional responsibility, it could be framed as a means to achieve improved working relationships with clients through providing comprehensive support. Thirdly, mental health staff's motivation to implement physical health monitoring has been deemed a key factor to the success of these efforts (Eldridge, Dawber, & Gray, 2011). A key finding of our study was the facilitative influence of performance monitoring policies on care coordinators' recognition of clients' physical health needs. This motivational value of performance monitoring corresponds with past recommendations to improve the provision of physical healthcare through encouraging the accountability of staff via assessing adherence to physical health monitoring protocols (Wilson et al., 2014), and

monitoring practitioners' performance regarding physical health interventions (Eldridge et al., 2011). The current UK clinical guidelines specify that routine monitoring of physical health indicators should be audited in annual team reports, and that healthcare trusts should ensure compliance with physical healthcare monitoring through utilising performance indicators (NICE, 2014). Our findings indicate the utility of these strategies to ensure successful implementation of the guidelines.

With regards to the UK setting specifically, the clinical guidelines on the care of people with SMI have been updated since the data for this study were collected, and now specify that physical health should routinely be monitored and attended to by mental healthcare providers in secondary care (NICE, 2014). The utility of providing physical health monitoring within this setting is supported by our findings. Namely, care coordinators discussed how secondary care clinical staff (both care coordinators and psychiatrists) increasingly considered clients' physical health, indicating that clinical staff are likely to perceive value in integrating the provision of mental and physical healthcare. Our findings did, however, also suggest that practices recommended in clinical guidance do not necessarily always correspond with routine practice. Namely, in line with clinical guidelines at the time when these data were collected (NICE, 2009), GPs were considered responsible for clients' physical health monitoring and treatment. However, our findings indicate that these clinical guidelines were not always reflected in practice, as limitations in GPs' practices, capacity and skills were reported to sometimes prevent primary care-led physical health monitoring. This discrepancy adds to previous literature on disparities between clinical guidelines and routine practice

(Carthey, Walker, Deelchand, Vincent, & Griffiths, 2011). This chasm has been highlighted specifically in relation to implementing best evidence regarding physical health screening (Wynaden et al., 2016). These reports indicate the utility of considering potential barriers to the implementation of the current UK clinical guidelines on physical healthcare provision in mental healthcare settings. The correspondence between attitudinal barriers to physical health monitoring amongst care coordinators as reported in our data and previous literature indicates the pervasiveness of these issues, even under circumstances where mental healthcare staff have been specifically instructed to attend to physical health (Dunbar et al., 2010; Wilson et al., 2014). Thus, considering the recommendations discussed above regarding how attitudinal barriers to physical health monitoring by mental healthcare staff can be mitigated is likely to be of value in any setting where efforts are made to integrate of physical health monitoring and mental health care, including the current UK context.

In addition to the similarities in attitudinal barriers to care in our study and previous literature, also our findings regarding care coordinator-reported illness- and system-related barriers to physical healthcare provision correspond with past international findings (De Hert et al., 2011; Dunbar et al., 2010; Happell et al., 2011; Wilson et al., 2014). These parallels between our findings and the broader literature further indicate that somewhat comparable barriers to physical health care provision in mental health settings can be observed in a range of settings.

It is necessary to consider these findings in view of this study's limitations. These data were collected prior to the release of the current UK clinical guidelines. However, as detailed above, there is utility in considering care coordinator perspectives predating these guidelines, as these can still help us understand barriers to implementing the practices the current guidelines recommend and how such issues can be overcome in the UK setting and beyond. Also, this study considered data from a relatively small sample ( $n=7$ ). However, we do not believe this prevented us from generating meaningful insights from our data. Past reports support that broad key themes can be detected, and full thematic saturation achieved, with samples as small as six (Guest, Bunce, & Johnson, 2006; Isman, Ekéus, & Berggren, 2013; Isman, Mahmoud Warsame, Johansson, Fried, & Berggren, 2013). Furthermore, our sample size meets the recommended 6-10 participants for small studies (Braun & Clarke, 2013). It also should be noted that as our study was conducted within a single service, the findings might be specific to that setting. This limitation does, however, apply to qualitative research overall. Transferability judgements are, however, facilitated by the provision of details regarding the study setting and sample, and the interpretation of our findings in the broader context of previous literature and healthcare policy.

## **Conclusions**

Our findings indicated that a range of potentially modifiable factors, such as perceptions of clinical roles and perceived reasons for attending to client's physical health, influenced care coordinators' views regarding their ability to monitor physical health in clients with SMI. These insights can inform efforts to mitigate barriers to

successful implementation of physical health interventions in mental health settings.

Such strategies are called for, as there is an urgent need to improve the physical health of people with SMI, and routine integration of physical and mental healthcare is promoted by academic literature and clinical practice guidelines.



### **Funding acknowledgement**

This paper summarises independent research funded by the National Institute for Health Research (NIHR) under its IMPACT Programme (Grant Reference Number RP-PG- 0606-1049). The research was supported by the NIHR Collaboration for Leadership in Applied Health Research and Care South London at King's College Hospital NHS Foundation Trust. The views expressed are those of the author(s) and not necessarily those of the NHS, the NIHR or the Department of Health.

### **Conflicts of interest**

None

## References

- Barnes, T. R. E., Paton, C., Cavanagh, M. R., Hancock, E., & Taylor, D. M. (2007). A UK audit of screening for the metabolic side effects of antipsychotics in community patients. *Schizophrenia Bulletin*, 33(6), 1397–1403. <http://doi.org/10.1093/schbul/sbm038>
- Baxter, A. J., Harris, M. G., Khatib, Y., Brugha, T. S., Bien, H., & Bhui, K. (2016). Reducing excess mortality due to chronic disease in people with severe mental illness: meta-review of health interventions. *The British Journal of Psychiatry*, 208(4), 322–329. <http://doi.org/10.1192/bjp.bp.115.163170>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <http://doi.org/http://dx.doi.org/10.1191/1478088706qp063oa>
- Braun, V., & Clarke, V. (2013). *Successful Qualitative Research: a practical guide for beginners*. London, UK: SAGE Publications, Inc.
- Carthey, J., Walker, S., Deelchand, V., Vincent, C., & Griffiths, W. H. (2011). Breaking the rules: understanding non-compliance with policies and guidelines. *British Medical Journal*, 343(3), d5283. <http://doi.org/10.1136/bmj.d5283>
- Chadwick, A. L., & Withnell, N. (2016). Developing confidence in mental health students to recognise and manage physical health problems using a learning intervention. *Nurse Education in Practice*, 19, 25–30. <http://doi.org/10.1016/j.nepr.2016.04.002>
- Das, P., Naylor, C., & Majeed, A. (2016). Bringing together physical and mental health A new frontier for integrated care. *Journal of the Royal Society of Medicine*, 109(10), 364–366. <http://doi.org/10.1177/0141076816665270>
- De Hert, M., Cohen, D., Bobes, J., Cetkovich-Bakmas, M., Leucht, S., Ndeti, D. M., ... Correll, C.

- U. (2011). Physical illness in patients with severe mental disorders. II. Barriers to care, monitoring and treatment guidelines, plus recommendations at the system and individual level. *World Psychiatry*, 10(2), 138–151. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/21633691>
- Department of Health. (2006). *Choosing Health: Supporting the physical health needs of people with severe mental illness*. London, UK: HM Government.
- Department of Health. (2008). *Refocusing the Care Programme Approach: Policy and Positive Practice Guidance*. London, UK: Department of Health.
- Department of Health. (2012). *A simple guide to Payment by Results*. Leeds, UK: Payment by Results Team Department of Health. Retrieved from [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/213150/PbR-Simple-Guide-FINAL.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/213150/PbR-Simple-Guide-FINAL.pdf)
- Dunbar, L., Brandt, T., Wheeler, A., & Harrison, J. (2010). Barriers and solutions to implementing metabolic risk assessment in a secondary mental health service. *Australasian Psychiatry*, 18(4), 322–5. <http://doi.org/10.3109/10398561003692571>
- Eldridge, D., Dawber, N., & Gray, R. (2011). A well-being support program for patients with severe mental illness: a service evaluation. *BMC Psychiatry*, 11(46). <http://doi.org/10.1186/1471-244X-11-46> [doi]
- Guest, G., Bunce, A., & Johnson, L. (2006). How Many Interviews Are Enough?: An Experiment with Data Saturation and Variability. *Field Methods*, 18(1), 59–82. <http://doi.org/10.1177/1525822X05279903>
- Happell, B., Ewart, S. B., Platania-Phung, C., Bocking, J., Griffiths, K., Scholz, B., & Stanton, R.

- (2016). Embedding a physical health nurse consultant within mental health services: Consumers' perspectives. *International Journal of Mental Health Nursing*, 25(4), 377–384. <http://doi.org/10.1111/inm.12185>
- Happell, B., Platania-Phung, C., Gray, R., Hardy, S., Lambert, T., McAllister, M., & Davies, C. (2011). A role for mental health nursing in the physical health care of consumers with severe mental illness. *Journal of Psychiatric and Mental Health Nursing*, 18(8), 706–711. <http://doi.org/10.1111/j.1365-2850.2010.01666.x>
- Happell, B., Platania-Phung, C., & Scott, D. (2013). Physical health care for people with mental illness: Training needs for nurses. *Nurse Education Today*, 33(4), 396–401. <http://doi.org/10.1016/j.nedt.2013.01.015>
- Hjorthøj, C., Stürup, A. E., Mcgrath, J. J., & Nordentoft, M. (2017). Years of potential life lost and life expectancy in schizophrenia: a systematic review and meta-analysis. *Lancet Psychiatry*, (published online Feb 21). [http://doi.org/10.1016/S2215-0366\(17\)30078-0](http://doi.org/10.1016/S2215-0366(17)30078-0)
- Isman, E., Ekéus, C., & Berggren, V. (2013). Perceptions and experiences of female genital mutilation after immigration to Sweden: An explorative study. *Sexual and Reproductive Healthcare*, 4(3), 93–98. <http://doi.org/10.1016/j.srhc.2013.04.004>
- Isman, E., Mahmoud Warsame, A., Johansson, A., Fried, S., & Berggren, V. (2013). Midwives' Experiences in Providing Care and Counselling to Women with Female Genital Mutilation (FGM) Related Problems. *Obstetrics and Gynecology International*, 2013, 785148. <http://doi.org/10.1155/2013/785148>
- Liu, N. H., Daumit, G. L., Dua, T., Aquila, R., Charlson, F., Cuijpers, P., ... Saxena, S. (2017). Excess mortality in persons with severe mental disorders: a multilevel intervention framework

- and priorities for clinical practice, policy and research agendas. *World Psychiatry*, 16(1), 30–40. <http://doi.org/10.1002/wps.20384>
- Millar, F., Sands, N., & Elsom, S. (2014). Factors influencing cardiometabolic monitoring practices in an adult community mental health service. *International Journal of Mental Health Nursing*, 23(6), 479–489. <http://doi.org/10.1111/inm.12085>
- Montejo, A. L. (2010). The need for routine physical health care in schizophrenia. *European Psychiatry*, 25(SUPPL. 2), S3–S5. [http://doi.org/10.1016/S0924-9338\(10\)71699-0](http://doi.org/10.1016/S0924-9338(10)71699-0)
- Morse, J. M. (1995). The Significance of Saturation. *Qualitative Health Research*, 5(2), 147–149. <http://doi.org/10.1177/104973239500500201>
- NICE. (2009). *Schizophrenia (CG82). Clinical guideline*. London, UK: National Institute for Health and Care Excellence.
- NICE. (2014). *Psychosis and schizophrenia in adults: prevention and management (CG178). Clinical guideline*. London, UK: National Institute for Health and Care Excellence.
- Retrieved from <https://www.nice.org.uk/guidance/cg178>
- Papanastasiou, E. (2013). The prevalence and mechanisms of metabolic syndrome in schizophrenia: a review. *Therapeutic Advances in Psychopharmacology*, 3(1), 33–51. <http://doi.org/10.1177/2045125312464385>
- Ritchie, J., Lewis, J., McNaughton Nicholls, C., & Ormston, R. (2013). *Qualitative Research Practice. A guide for social science students & researchers* (2nd ed.). London, UK: SAGE Publications Ltd.
- Robson, D., & Haddad, M. (2012). Mental health nurses' attitudes towards the physical health care of people with severe and enduring mental illness: The development of a

measurement tool. *International Journal of Nursing Studies*, 49(1), 72–83.

<http://doi.org/10.1016/j.ijnurstu.2011.07.011>

Royal College of Psychiatrists. (2013). *Whole-Person Care: From Rhetoric to Reality (Achieving Parity Between Mental and Physical Health) (OP88)*. London, UK: Royal College of Psychiatrists. Retrieved from

<http://www.rcpsych.ac.uk/usefulresources/publications/collegereports/op/op88.aspx>

Sale, J. E. M., Lohfeld, L., & Brazil, K. (2002). Revisiting the quantitative-qualitative debate: Implications for mixed-methods research. *Quality and Quantity*, 36, 43–53.

Thornicroft, G. (2013). Premature death among people with mental illness. *BMJ*, 346(f2969).

<http://doi.org/10.1136/bmj.f2969>

Ventriglio, A., Gentile, A., Stella, E., & Bellomo, A. (2015). Metabolic issues in patients affected by schizophrenia: Clinical characteristics and medical management. *Frontiers in*

*Neuroscience*, 9, 297. <http://doi.org/10.3389/fnins.2015.00297>

Wilson, E., Randall, A. C., & Weaver, T. (2014). Monitoring and management of metabolic abnormalities: mixed-method evaluation of a successful intervention. *Australasian Psychiatry*, 22(3), 248–253. <http://doi.org/10.1177/1039856214529000>

Working Group for Improving the Physical Health of People with SMI. (2016). *Improving the physical health of adults with severe mental illness: essential actions (OP100)*. London, UK: Royal College of Psychiatrists. Retrieved from

<http://www.rcpsych.ac.uk/mediacentre/adultswithsmi.aspx>

Wynaden, D., Heslop, B., Heslop, K., Barr, L., Lim, E., Chee, G. L., ... Murdock, J. (2016). The chasm of care: Where does the mental health nursing responsibility lie for the physical

health care of people with severe mental illness? *International Journal of Mental\_ Health Nursing*, 25(6), 516–525. <http://doi.org/10.1111/inm.12242>

## Tables & figures

**Table 1:** Key characteristics of study participants (care coordinators; n=7)

	n	%
<b>Gender</b>		
Female	3	42.9
Male	4	57.1
<b>Age*</b>		
30-39	2	28.6
40-49	3	42.9
50-59	1	14.3
60-69	1	14.3
<b>Ethnicity</b>		
White British	5	71.4
Black African	1	14.3
Chinese	1	14.3
<b>Years since qualified</b>		
0-9	1	14.3
10-19	4	57.1
20-29	0	0.0
30-39	2	28.6
40+	0	0.0
<b>Professional background</b>		
Mental Health Nursing	4	57.1
Occupational Therapy	1	14.3
Research	1	14.3
Social Work	1	14.3
<b>Caseload (number of patients)</b>		
5-9	2	28.6
10-14	3	42.9
15+	2	28.6

\*mean age 46 years (SD 9.76, range 37-61)



**Table 2:** Overview of themes and subthemes emerging from the analysis

<b>Themes</b>	<b>Subthemes</b>
1. Perceived boundaries of professional roles	<ul style="list-style-type: none"><li>- Clearly defined clinical roles</li><li>- Overstepping scope of care coordinator role</li></ul>
2. Barriers to physical healthcare provision	<ul style="list-style-type: none"><li>- Illness related factors</li><li>- System-related factors</li></ul>
3. Factors motivating physical healthcare provision	<ul style="list-style-type: none"><li>- Facilitating the therapeutic relationship</li><li>- Staff performance monitoring policies</li></ul>